



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/776,520	02/12/2004	Michiaki Takizawa	0994-0232P	4122

2292 7590 07/27/2006

BIRCH STEWART KOLASCH & BIRCH
PO BOX 747
FALLS CHURCH, VA 22040-0747

EXAMINER

LIANG, REGINA

ART UNIT	PAPER NUMBER
----------	--------------

2629

DATE MAILED: 07/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/776,520

Applicant(s)

TAKIZAWA ET AL.

Examiner

Regina Liang

Art Unit

2629

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 June 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This Office Action is responsive to amendment filed 6/12/06. Claims 1-14 are currently pending in the application.

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 103

3. Claims 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's admitted prior art (Figs. 5, 6, and paragraphs [003]-[007]) in view of Deeran et al (US. PAT. NO. 5,594,471 hereinafter Deeran).

As to claims 13, 14, Applicant's admitted prior art describes an apparatus comprising an injection molding machine and an input device. The input device is described in paragraph [005], to comprise a touch sensing region for inputting data overlaying a display device. The paragraph [006] teaches that many inputs are required for injection molding machines and that these require the addition of a separate switch panel. This switch panel is disclosed in the same paragraph to comprise a ten-key numeric input, cursor movement keys, and a plurality of function keys, all of which are disposed on one side of the display screen. As shown in Figs. 5 and 6 of the admitted prior art, the input device (50) including an electronic display screen (51) defined within a first area (51v), a touch input panel having a sensing region being defined within a second area (52). The Applicant's admitted prior art does not teach that the touch panel having a panel extension portion could be provided to replace the separate switch panel.

Art Unit: 2629

Fig. 1 of Deeran teaches an industrial input device that comprises a display screen (16) with touch screen (12) overlaying the display. The touch screen is disclosed in column 5, lines 51-54, to be responsive to a finger. It is disclosed in column 3, lines 23-32 that the touch screen is larger than the display area and defines a panel extension portion (18). Indicia (15) indicating the function of keys in the panel extension are taught in column 3, lines 36-41. Template (15) is provided with markings and attached to touch screen (12) with gasket (19). Figure 1 discloses that a ten-key numeric input, cursor movement keys, and a plurality of function keys may be provided in the panel extension region.

Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to replace the separate switch panel taught by the admitted prior art with the panel extension portion taught by Deeran in order to eliminate the cost associated with producing a separate switch panel.

4. Claims 1-8, 10, 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's admitted prior art and Deeran, and further in view of Fisher (US. 4,387,367).

As to claim 1, note the discussion of claims 13 and 14 above. Applicant's admitted prior art as modified by Deeran differs from claim 1 in that the indicia is not provided on an underside of the panel extension portion. However, Fisher teaches a keyboard device having a touch panel (10'), an indicia layer (44) provided on an underside of the touch panel indicating functions of the plurality of input keys (see Fig. 5 and col. 4, lines 30-42). Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Applicant's admitted prior art as modified by Deeran to have the indicia provided on an underside of the

Art Unit: 2629

panel extension portion of the touch panel so that the indicia layer can be easily changed to modify the labeling of the keys and the indicia area are visible through the touch areas (col. 2, lines 34-36 of Fisher).

As to claim 2, Applicant's admitted prior art teaches the molding machine is an injection molding machine [003].

As to claim 3, Fig. 6 of the admitted prior art teaches the touch panel (52) includes input keys (53) for operating parameters of the injection molding machine.

As to claims 4-7, Fig. 6 of the admitted prior art teaches the plurality of input keys includes a ten key numeric input (54), a cursor movement input (56) and a plurality of function keys (55).

As to claim 8, Deeran teaches the display screen are visible through the touch screen allow the user to view the display image on the display screen, thus the extension panel of the single piece touch screen (12) is transparent.

As to claim 10, Fig. 6 of Applicant's admitted prior art teaches the plurality of input keys including a ten-key numeric input (54), cursor movement keys (56), and a plurality of function keys (55), all of which are disposed on one side of the display screen.

As to claim 11, Fig. 5 of Applicant's admitted prior art teaches a support panel (57) to support the switch panel, thus, Applicant's admitted prior art as modified by Deeran would have a support panel to support the extension portion as claimed.

Art Unit: 2629

5. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's admitted prior art, Deeran and Fisher as applied to claim 1 above, and further in view of Koike et al (US 4,336,530 hereinafter Koike).

Applicant's admitted prior art as modified by Deeran and Fisher teaches the indicia layer is disposed on the underside of the extension panel. Applicant's admitted prior art as modified by Deeran and Fisher does not disclose the indicia are printed on a printed sheet. However, Koike teaches an indicia sheet carrying a plurality of groups of key indicia or markings, and the key indicia are printed on the indicia sheet (col. 2, lines 31-33; col. 3, lines 64-65). Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Applicant's admitted prior art as modified by Deeran and Fisher to have a printed indicia as taught by Koike to reduce the cost in the manufacture of key indicia sheet (col. 3, lines 63-64 of Koike).

6. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's admitted prior art Deeran and Fisher as applied to claim 1 above, and further in view of Ingraham (US 5,087,825).

Applicant's admitted prior art as modified by Deeran and Fisher does not disclose the touch panel is electrostatic capacitive type. However, Ingraham teaches a touch panel comprising a capacity responsive keyboard (col. 1, lines 6-10). Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Applicant's admitted prior art as modified by Deeran and Fisher to have a capacitive type touch panel as

Art Unit: 2629

taught by Ingraham so as to provide equal sensitivity and to eliminate an air-entrapped interface between the pad members and the dielectric member (col. 4, lines 24-25, 28-30 of Ingraham).

Response to Arguments

7. Applicant's arguments with respect to claims 1-14 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

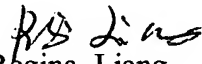
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Regina Liang whose telephone number is (571) 272-7693. The examiner can normally be reached on Monday-Friday from 8AM to 5:00PM.

Art Unit: 2629

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Hjerpe, can be reached on (571) 272-7691. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Regina Liang
Primary Examiner
Art Unit 2674

7/14/06